

I CLAIM

1. A method of increasing air temperature of compressed air flowing to an air drying device through an air delivery inlet duct from an air compressor comprising:

5 compressing ambient air with said air compressor,

directing compressed air from said air compressor as a

compressed air flow toward said air delivery inlet duct,

diverting a portion of said compressed air flow from said air

10 delivery inlet duct back to said air compressor to raise the temperature of said

compressed air flow, and

passing said compressed air flow from said air delivery inlet duct
to said air drying device.

2. A method according to Claim 1 further comprising varying the portion of
said compressed air flow diverted from said air delivery inlet duct.

3. A method according to Claim 1 further comprising diverting between
about one percent and about eighty percent of total air compressed by said compressor
back to said compressor.

4. A method according to Claim 1 further comprising varying the portion of
said compressed air flow diverted from said air delivery inlet duct and maintaining a
selected elevated air temperature of compressed air passed to said air drying device.

5. A method according to Claim 1 further comprising compressing air in
said compressor to between about 0.5 to about 10.0 pounds per square inch above

ambient pressure.

6. A method of elevating the temperature of a compressed air flow to an air drying device through an air delivery inlet duct utilizing an air compressor without externally heating said compressed air flow comprising:

drawing ambient air into said air compressor,
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compressing said ambient air in said air compressor to produce
said compressed air flow,

recirculating a portion of said compressed air flow back to said
air compressor to raise the temperature thereof, and

directing the remaining portion of said compressed air flow to
said air drying device through said air delivery inlet duct.

7. A method according to Claim 6 further comprising compressing air in
said compressor to a pressure of between about 0.5 to about 10.0 pounds per square
inch above ambient air pressure.

8. A method according to Claim 6 further comprising varying said portion of
said compressed air flow that is recirculated back to said air compressor.

9. A method according to Claim 6 further comprising maintaining a
predetermined elevation in compressed air temperature directed to said air delivery
device above ambient air temperature.

10. In an air blower system for a compressed air drying device employing an
air compressor that supplies air under pressure to an air delivery inlet duct, the

improvement comprising a compressed air recirculation loop leading from said air
delivery inlet duct back to said air compressor and a valve for diverting a portion of air
5 flowing from said compressor toward said air delivery inlet duct back to said air
compressor through said recirculation loop.

11. An air blower system according to Claim 10 wherein said air compressor
is a single stage centrifugal blower.
12. An air blower system according to Claim 10 wherein said valve is an
adjustable valve.